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ration using an inlet having a seven-fold higher conductance compared to that of the standard interface. Assuming the ion transmission through an orifice inlet is proportional to the gas conductance, these results indicate the ion transmission through the jet disturber equipped ion funnel is close to 100%. 5

## CLOSURE

While a preferred embodiment of the present invention has been shown and described, it will be apparent to those skilled in the art that many changes and modifications may be made without departing from the invention in its broader aspects. The appended claims are therefore intended to cover all such changes and modifications as fall within the true spirit and scope of the invention. 10

We claim:

1. A method for introducing charged particles into a device comprising the steps of:

- a) generating ions in a relatively high pressure region external to the device and 20
- b) directing said ions through at least one aperture extending into the device, and
- c) further directing said ions through an ion funnel within the interior of the device having a jet disturber positioned within said ion funnel. 25

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2. The method of claim 1 wherein the device is provided as a mass spectrometer.

3. The method of claim 1 wherein the at least one aperture is a multicapillary inlet.

4. The method of claim 1 wherein said relatively high pressure region is at between  $10^{-1}$  millibar and 1 bar.

5. The method of claim 1 wherein the charged particles are generated with an electrospray ion source.

6. An apparatus for introducing charged particles generated at a relatively high pressure into a device maintained at a relatively low pressure comprising an ion funnel having a jet disturber positioned within said ion funnel.

7. The apparatus of claim 6 further comprising a multicapillary inlet extending into the device, whereby charged particles generated in the relatively high pressure region move through the multicapillary inlet and into the ion funnel. 15

8. The apparatus of claim 6 wherein the device is a mass spectrometer.

9. The apparatus of claim 6 wherein said relatively high pressure region is at between  $10^{-1}$  millibar and 1 bar.

10. The apparatus of claim 7 further comprising an electrospray ion source interfaced with the plurality of apertures.

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